An Example of Long-Form Audit Reporting

Special Report

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Introduction

The Forest Practices Board is changing its approach to compliance audits of certified forest licensees. In order to maintain their certified status, certified forest licensees may have undertaken an independent verification audit of their forestry practices. These verification audits may also include compliance with the practices required by the Forest Practices Code, so there is potential for duplication of verification audits with the Board's compliance auditing.

The randomly chosen 2002 audit of TFL 23, held by Pope & Talbot Ltd. (P&T), enabled the Board to develop and test its auditing procedures for a certified company. P&T's operations under TFL 23 are certified under the International Organization for Standardization (ISO) 14001, and the Sustainable Forestry Initiative (SFI). With the co-operation of P&T and its certifying registrar, the Board's auditors assessed the adequacy and completeness of P&T's management control structure and the audit work performed by its certifying registrar. This allowed the Board's auditors to gain the same level of assurance about compliance with the Code, with substantially less cost and time in the field.

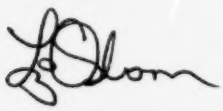
The Board's report on the results of the TFL 23 audit was issued on March 24, 2003, along with the report from the auditor of record, in accordance with the Board's usual reporting practice.

One of the benefits of the new audit approach was the opportunity to conduct a detailed examination of P&T's management controls related to the protection of key environmental values. This enables the auditor to include a description of key environmental system controls in the audit report, thereby providing more meaningful information about the auditee's practices on the ground to the interested public. Although key control descriptions were not included in the March 24, 2003 report for the audit of TFL 23, the Board would like to provide more detailed audit reports in the future. In addition, the approach used in auditing TFL 23 could be applied to both certified and non-certified licensees, as long as management systems are in use and operations are large enough to make the approach more cost-effective.

This special report demonstrates this alternative reporting model, using the results of the audit of TFL 23 as an example. It should be noted that the level of detail provided in this report is based on a pilot process and does not necessarily reflect all of P&T's control processes for each feature. In fact, the Board anticipates that the level of detail provided using this model would increase in future audit reports. This special report includes a report from the auditor of record, using the information gathered in the audit of TFL 23, only to illustrate changes that will be made in future auditor of record reports, where appropriate. It does not replace the audit report for TFL 23 that was issued on March 24, 2003. In addition, a report from the Board would continue to accompany auditor of record reports for future audits.

The Board believes that this detailed focus on the licensees' control systems, which are designed to meet requirements of the Forest Practices Code and higher level plans, presents more meaningful information about forest practices than traditional short-form audit reports. It provides more complete information about a licensee's practices, including compliant practices, and controls used by the licensee in managing key environmental values. This style of reporting also provides improved accountability for the auditor's approach and performance, and makes the audit process more transparent.

It is the Board's intention to use a long form report format in the future whenever opportunities to do so arise.



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Auditor of Record Report

1.0 Introduction

As part of the Forest Practices Board's 2002 compliance audit program, Tree Farm Licence 23 was selected for audit from the population of major forest licences within the Nelson Forest Region. The licence, held by Pope & Talbot Ltd. (P&T), was selected randomly and not on the basis of location or level of performance.

Tree Farm Licence (TFL) 23 is an area-based tenure within the Arrow and Columbia Forest Districts. TFL 23 is situated south of Glacier National Park, and extends from Valhalla Provincial Park in the east to Monashee Provincial Park in the west. The total area of TFL 23 is 556,389 hectares. The topography in this area is diverse, including areas of pine flats and areas of mountainous terrain. The varied terrain and climate support a variety of commercial tree species, including Douglas fir, western hemlock, Engelmann and white spruce, western white pine and lodgepole pine, sub-alpine fir (balsam), western larch and western red cedar.

There are four community watersheds and abundant riparian features within the TFL, good habitat for grizzly bears and a significant ungulate population—including caribou—throughout the TFL's mountainous areas. Pine beetles are a forest health concern in the southern pine areas of the TFL.

P&T has an allowable annual cut of approximately 600,000 cubic metres in TFL 23, substantially all of which was harvested during the audit period. Harvesting is predominantly by ground-based methods and the silviculture system used most frequently was clearcut with reserves. During the period of the audit, P&T's operations were scattered throughout the TFL.

Landscape planning status

The *Kootenay-Boundary Higher Level Plan*[i] (KBHLP) took effect under the *Forest Practices Code of British Columbia Act* and related regulations (the Code) on January 31, 2001, and applies to the TFL 23 area. This area of land is also defined by 13 landscape units with designated biodiversity emphasis options.

Certification status

P&T's woodlands operations under TFL 23 are certified under the International Organization for Standardization (ISO) 14001[ii] and, at the time of the audit, were in the process of being certified under the Sustainable Forestry Initiative Program[iii] (SFI). The ISO and SFI programs each have a standard that requires compliance with local legislation.

2.0 Audit Scope and Approach

The Board's *Compliance Audit Reference Manual, Version 5.1, May 2002*, sets out the standards and procedures used in Board audits of compliance with the Code. The Board authorized a change from the reference manual for this audit to assess aspects of P&T's management control framework.

The audit period for which P&T's activities were examined for compliance was September 1, 2001, to October 10, 2002.

The audit involved examination of P&T's:

- procedures established to achieve Code compliance; and
- forest planning and practices carried out.

Controls testing

P&T's procedures for achieving Code compliance were examined to determine the extent, if any, that the procedures reduced the risk of P&T not complying with the Code. The completeness, performance and effectiveness of procedures were assessed.

Where the results of controls testing indicated that P&T's procedures sufficiently reduced the risk of non-compliance with the Code, the Board reduced its substantive testing levels.

The assessment of controls included examining the audit work conducted by P&T's independent certification auditors in determining whether P&T's procedures for achieving Code compliance conformed with ISO and SFI standards.

Where there was sufficient evidence to demonstrate the adequacy of controls testing by P&T's independent certification auditors, the results of the certification auditors' tests were considered by the Board auditor.

Substantive testing

The audit examined P&T's forest planning and field activities in the areas of operational planning (including forest development planning[iv] and silviculture prescriptions[v]); timber harvesting; road construction, maintenance and deactivation; silviculture; and fire protection.

These activities, plans and obligations were assessed for compliance with the Code, including consistency with landscape unit biodiversity emphasis designations and relevant aspects of the KBHLP.

The assessment of these activities included considering the substantive tests (i.e. specific field examinations of P&T's forestry practices) carried out by P&T's independent certification

auditors in determining whether P&T had achieved the ISO and SFI standards for compliance with local legislation (the Code).

3.0 Audit Findings

Methodology

The audit work focused on forest planning and practices associated with these key environmental values within TFL 23:

- visual quality
- wildlife habitat
- riparian features
- water quality
- soil conservation and stability
- forest health
- biodiversity

These values were established through reviewing applicable higher level plan and forest development plan objectives, interviews with P&T managers, and auditors' knowledge of the TFL 23 operating area. The audit tests of P&T's controls focused on procedures related to the identification and management of these key environmental values. The tests of controls included examining and re-performing some of the audit work carried out by P&T's independent certification auditors in June 2002 (SFI registration audit and ISO surveillance audit). P&T procedures tested included:

- forest planning processes, including inventory information maintained by P&T, riparian assessment, wildlife habitat identification and verification processes, visual assessment, forest health assessments and old-growth identification and management;
- site-specific inspection processes, including pre-work information gathering and communication procedures, monitoring and inspection processes and inspection reporting and completion of follow-up actions; and
- road maintenance inspection processes, including identification and completion of maintenance works required.

3.1 Visual quality

The TFL 23 licence area encompasses or borders on a number of communities–the largest of which are Nakusp, Castlegar and Revelstoke. Highway #23 runs north to south the entire length of the TFL area.

The terrain is mountainous in many areas, with forest activities visible from the communities and highways. The KBHLP establishes scenic areas where the Code requires visual quality objectives be met for proposed forest activities.

- P&T maintains a computerized database of geographic information (GIS) that includes all scenic areas.
- P&T carries out visual impact assessments for all proposed forest activities within the scenic areas.
- Where necessary, P&T also carries out computer modelling to simulate visual impacts of proposed harvest areas.
- P&T has two staff with specialized training in visual quality management techniques.
- P&T has undertaken visual rehabilitation measures on a number of cutblocks harvested prior to the Code that are visible from Nakusp.

The audit examined a sample of P&T's forest planning and practices in established scenic areas to assess whether the above processes had been implemented effectively. The audit also considered the work conducted by P&T's certification auditors, including re-performing some of the audit tests, which included assessing P&T's visual management practices.

The audit found P&T's planning and practices complied, in all significant respects, with the Code requirements for visual quality, including consistency with the KBHLP objectives.

3.2 Wildlife habitat

The TFL 23 area contains rich and diverse wildlife habitat, with numerous species existing throughout. The audit focused on mountain caribou and grizzly bear habitat because of the presence of public objectives associated with these habitats.

The KBHLP identifies important habitat for mountain caribou and grizzly bears, and establishes objectives for retaining wildlife habitat attributes. The KBHLP's objective to maintain the old-growth structure of forests adjacent to avalanche tracks and within connectivity corridors, which is important for grizzly bear habitat, has not been fully implemented. Government has not yet carried out the required identification and mapping of the avalanche tracks. The Code requires that planned forest activities be consistent with the KBHLP objectives.

- P&T maintains a GIS database that contains KBHLP habitat areas.
- P&T has completed extensive inventory work to identify specific locations where caribou roam, and to assess suitability and capability of stands for caribou habitat.
- P&T layout and silviculture staff have been trained in identified wildlife.

The audit examined a sample of P&T's forest planning and practices associated with wildlife habitat to assess whether the above processes had been implemented effectively. The audit also considered the work conducted by P&T's certification auditors, including re-performing some of the audit tests, which included assessing P&T's wildlife habitat management practices.

The audit found P&T's planning and practices complied, in all significant respects, with the Code requirements for wildlife habitat.

It was not possible to assess the extent of protection of grizzly habitat adjacent to avalanche tracks because government has not yet completed the required inventory work.

3.3 Riparian features

The TFL 23 licence area surrounds a substantial portion of the Upper and Lower Arrow Lakes and contains many fish-bearing streams.

The KBHLP does not address these riparian features. The Code contains a number of requirements for riparian management, including the identification, classification and management of riparian features.

- P&T completes field assessments of riparian features as part of operational plan development, and prescribes practices in accordance with the Code.
- P&T has also developed and implemented a riparian assessment field card to assist staff in developing prescriptions that address the morphology of each stream, which is over and above the requirements of the Code (i.e., rather than prescriptions based on the class of stream as required by the Code).
- P&T staff and contractors have been trained in riparian management.

The audit examined a sample of P&T's forest planning and practices in riparian areas to assess whether the above processes had been implemented effectively. The audit also considered the work conducted by P&T's certification auditors, including re-performing some of the audit tests, which included assessing P&T's riparian management practices.

The audit found P&T's planning and practices complied, in all significant respects, with the Code requirements for riparian management.

3.4 Water quality

The TFL 23 licence area contains four community watersheds. The KBHLP does not address community watersheds, but it does establish objectives for consumptive-use streams outside community watersheds. These objectives do not take effect until after government identifies the location of water intakes used for human consumption. At the time of the audit, this mapping had not been completed.

The Code contains a number of requirements for practices in community watersheds, including watershed, soil erosion and terrain stability assessments; water user notification; and protection of water intakes and infrastructures.

- P&T completed watershed assessments in accordance with the interior watershed Assessment Procedures.
- P&T staff have received training in water quality laws.

The audit examined a sample of P&T's forest planning and practices in community watersheds to assess whether the above processes had been implemented effectively. The audit also considered the work conducted by P&T's certification auditors, including re-performing some of the audit tests, which included assessing P&T's practices in community watersheds.

The audit found P&T's planning and practices complied, in all significant respects, with the Code requirements for practices in community watersheds.

Subsequent to the audit, government has completed the mapping of consumptive-use streams.

3.5 Soils

The TFL 23 licence area includes areas of steep terrain with fine textured soils prone to landslides, and historically there have been landslides. The KBHLP does not address terrain stability or soil conservation. The Code contains a number of requirements for the assessment and management of soils, including assessments, development of operational plans to protect soil resources, and practices to minimize impacts on soil.

- P&T maintains a GIS database that contains terrain stability mapping across the entire TFL area.
- P&T has developed a system for identification, reporting and remediation of landslides.

The audit examined a sample of P&T's forest planning and practices for soil and terrain stability to assess whether the above processes had been implemented effectively. The audit also considered the work conducted by P&T's certification auditors, including re-performing some of the audit tests, which included assessing P&T's practices for soil conservation and terrain stability.

The audit found P&T's planning and practices complied, in all significant respects, with the Code requirements for soils and terrain stability.

3.6 Forest health

Mountain pine beetle is the largest landscape level forest health concern in TFL 23. The KBHLP does not address forest health. The Code requires forest health assessments and practices to reduce the risk from forest health factors.

- P&T has beetle management plans for areas of the TFL that are at risk from mountain pine beetle.
- P&T has determined stand susceptibility to beetle for pine leading stands.
- P&T has targeted the most susceptible stands for priority harvest.
- P&T has integrated its patch size and seral-stage analyses with the stand susceptibility ratings to maximize the removal of susceptible timber within KBHLP objectives for biodiversity.

The audit examined a sample of P&T's forest planning and practices for addressing forest health, to assess whether the above processes had been implemented effectively. The audit also considered the work conducted by P&T's certification auditors, including re-performing some of the audit tests, which included assessing P&T's practices for addressing forest health factors.

The audit found P&T's planning and practices complied, in all significant respects, with the Code requirements for forest health.

3.7 Biodiversity

The KBHLP establishes target retention levels for old and mature forest. The target levels are set out by landscape unit and natural disturbance type.

In the absence of higher-level plan objectives for cutblock size, the maximum cutblock size allowed by the Code is 40 hectares. The Code allows larger cutblocks to recover damaged timber, or where the larger cutblocks are consistent with structural characteristics, and temporal and spatial distribution of natural openings.

- P&T has completed seral-stage distribution and patch-size analysis for the TFL.
- P&T has identified areas for old and mature forest retention and recruitment.
- P&T utilizes the patch-size analysis, in conjunction with forest health assessments, in planning landscape-level biodiversity.

The audit examined a sample of P&T's forest planning and practices for addressing biodiversity, to assess whether the above processes had been implemented effectively. The audit also considered the work conducted by P&T's certification auditors, including re-performing some of the audit tests, which included assessing P&T's practices for addressing biodiversity.

The audit found P&T's planning and practices complied, in all significant respects, with the Code requirements for biodiversity, including consistency with the KBHLP objectives.

4.0 Audit Opinion

This section in a long-form audit report will include the auditor's opinion about the compliance of the forest practices audited. In forming his or her opinion, the auditor will assess the significance of any non-compliance observations utilizing the same standards as in other Board audits and set out in the Forest Practices Board's *Compliance Audit Reference Manual*.

[i] A higher-level plan is a forest resource management objective that is established as legally binding by a written order. The objective applies to a resource management zone, landscape unit, sensitive area, recreation site, recreation trail, or interpretive forest site. Higher-level plans are a provision of the *Forest Practices Code of BC Act* that give direction to operational plans.

[ii] The International Organization for Standardization (ISO) is a non-governmental worldwide federation of national standards bodies. ISO 14001 is the international standard defining the organizational structure, responsibilities, procedures, processes and resources required in implementing environmental management systems. It does not specify environmental performance criteria, but provides a framework for an organization to set the criteria together with objectives and targets plus auditing and reporting systems. Undertaking independent certification under ISO 14001 is voluntary.

[iii] The Sustainable Forestry Initiative Program (SFI) is a comprehensive system of principles, objectives, and performance measures that integrates the perpetual growing and harvesting of trees with the protection of wildlife, plants, soil and water quality. Through a voluntary verification process, member companies and licensees may choose to apply a verification approach to document and communicate their conformance to the SFI standard.

[iv] A forest development plan is an operational plan that provides the public and government agencies with information about the location of proposed roads and cutblocks for harvesting timber over a period of at least five years. The plan must specify measures that will be carried out to protect forest resources. It must also be consistent with any higher-level plans. Site-specific plans are required to be consistent with the forest development plan.

[v] A silviculture prescription is a site-specific operational plan that describes the forest management objectives for an area to be harvested (a cutblock). The silviculture prescriptions examined in the audit are required to describe the management activities proposed to maintain the inherent productivity of the site, accommodate all resource values, including biological diversity, and produce a free-growing stand capable of meeting stated management objectives. Silviculture prescriptions must be consistent with forest development plans that encompass the area to which the prescription applies.